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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R04-OAR-2018-0552; FRL-9997-32-Region 4]

Air Plan Approval and Designation of Areas; FL; Redesignation of the Hillsborough

County 2010 1-Hour Sulfur Dioxide Nonattainment Area to Attainment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: In a letter dated June 7, 2018, the State of Florida, through the Florida Department of Environmental Protection (FDEP), submitted a request for the Environmental Protection Agency (EPA) to redesignate the Hillsborough County sulfur dioxide (SO₂) nonattainment area (hereinafter referred to as the “Hillsborough County Area” or “Area”) to attainment for the 2010 1-hour SO₂ primary national ambient air quality standard (NAAQS or standard) and to approve an accompanying State Implementation Plan (SIP) revision containing a maintenance plan for the Area. The submittal was received by EPA on June 12, 2018. Through a letter dated April 16, 2019, FDEP submitted a revision to the June 7, 2018, redesignation request and SIP revision asking EPA to incorporate certain conditions into the SIP from a recent permit revision applicable to the Tampa Electric Company – Big Bend Station (Big Bend) power plant. The submission was received by EPA on April 25, 2019. EPA is proposing to determine that the Hillsborough County Area attained the 2010 1-hour SO₂ NAAQS by its applicable attainment date of October 4, 2018; to approve the SIP revision containing the State’s plan for maintaining attainment of the 2010 1-hour SO₂ standard and to incorporate the maintenance plan into the SIP; to redesignate the Hillsborough County Area to attainment for the

2010 1-hour SO₂ NAAQS; and to incorporate into the SIP certain permitting conditions applicable to Big Bend, including a condition that lowers the SO₂ emissions cap and a condition that restricts fuel use at two electric generating units to natural gas.

DATES: Comments must be received on or before **[Insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2018-0552 at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Madolyn Sanchez, Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Ms. Sanchez may be reached by phone at (404) 562-9644 or via electronic mail at sanchez.madolyn@epa.gov.

SUPPLEMENTARY INFORMATION:

I. What are the Actions EPA is Proposing to Take?

EPA is proposing to take the following four separate but related actions: (1) to determine that the Hillsborough County Area attained the 2010 1-hour SO₂ NAAQS by its applicable attainment date of October 4, 2018; (2) to approve Florida's maintenance plan for maintaining the 2010 1-hour SO₂ NAAQS in the Area and incorporate it into the SIP; (3) to redesignate the Hillsborough County Area to attainment for the 2010 1-hour SO₂ NAAQS; and (4) incorporate certain revised permitting conditions applicable to Big Bend into the SIP, including a condition that lowers the SO₂ emissions cap and a condition that limits fuel use to natural gas at two electric generating units. The Hillsborough County Area is comprised of the portion of Hillsborough County encompassed by the polygon with the vertices using Universal Traverse Mercator (UTM) coordinates in UTM zone 17 with datum NAD83 as follows: (1) Vertices-UTM Easting (m) 358581, UTM Northing 3076066; (2) vertices-UTM Easting (m) 355673, UTM Northing 3079275; (3) UTM Easting (m) 360300, UTM Northing 3086380; (4) vertices-UTM Easting (m) 366850, UTM Northing 3086692; (5) vertices-UTM Easting (m) 368364, UTM Northing 3083760; and (6) vertices-UTM Easting (m) 365708, UTM Northing 3079121. There is one major point source of SO₂ emissions within the Hillsborough County Area – Mosaic Fertilizer, LLC Riverview facility (Mosaic).¹ Big Bend is located just outside of the Area and is the largest source of SO₂ within 25 km outside of the Area.

¹ There are two smaller point sources within the Area – Ajax Paving Industries, Inc. Plant No. 6 (Ajax) and Harsco Minerals (Harsco). Cumulative SO₂ emissions for these sources were less than 6 tons and 1 ton according to

EPA is proposing to determine that the Hillsborough County Area attained the 2010 1-hour SO₂ NAAQS by its applicable attainment date of October 4, 2018. EPA is also proposing to approve Florida's SIP revision containing the maintenance plan for the Hillsborough County Area in accordance with the requirements of section 175A of the Clean Air Act (CAA or Act). The maintenance plan submitted with Florida's request for redesignation is intended to help keep the Hillsborough County Area in attainment of the 2010 1-hour SO₂ NAAQS through the year 2032.

EPA is also proposing to determine that the Hillsborough County Area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. Accordingly, EPA is proposing to approve a request to change the designation of the portion of Hillsborough County that is designated nonattainment to attainment for the 2010 1-hour SO₂ NAAQS.

Finally, EPA is proposing to incorporate certain revised permitting conditions applicable to Big Bend into the Florida SIP.

II. Background

On June 2, 2010, EPA revised the primary SO₂ NAAQS, establishing a new 1-hour SO₂ standard of 75 parts per billion (ppb). *See* 75 FR 35520 (June 22, 2010). Under EPA's regulations at 40 CFR part 50, the 2010 1-hour SO₂ NAAQS is met at a monitoring site when the 3-year average of the annual 99th percentile of daily maximum 1-hour average concentrations is less than or equal to 75 ppb (based on the rounding convention in 40 CFR part 50, appendix T). *See* 40 CFR 50.17. Ambient air quality monitoring data for the 3-year period must meet a data

Florida's annual operating report for 2011 and 2015, respectively. *See* Table 5 below and Appendix D in the June 7, 2018, submittal.

completeness requirement. A year meets data completeness requirements when all four quarters are complete, and a quarter is complete when at least 75 percent of the sampling days for each quarter have complete data. A sampling day has complete data if 75 percent of the hourly concentration values, including state-flagged data affected by exceptional events which have been approved for exclusion by the Administrator, are reported.²

Upon promulgation of a new or revised NAAQS, the CAA requires EPA to designate as nonattainment any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the NAAQS. EPA designated the Area as nonattainment for the 2010 1-hour SO₂ NAAQS, effective October 4, 2013, using 2009-2011 complete, quality assured, and certified ambient air quality data. *See* 78 FR 47191 (August 5, 2013). Under the CAA, nonattainment areas must attain this NAAQS as expeditiously as practicable but not later than five years after the October 4, 2013, effective date of the designation. *See* CAA section 192(a). Therefore, the Hillsborough County Area's applicable attainment date was no later than October 4, 2018.

EPA's 2010 SO₂ nonattainment designation for the Area triggered an obligation for Florida to develop a nonattainment SIP revision addressing certain requirements under CAA title I, part D, subpart 1 (hereinafter "Subpart 1") and to submit that SIP revision to EPA in accordance with the deadlines in title I, part D, subpart 5 (hereinafter "Subpart 5"). Subpart 1 contains the general requirements for nonattainment areas for criteria pollutants, including requirements to develop a SIP that provides for the implementation of reasonably available control measures (RACM), requires reasonable further progress (RFP), includes base-year and

² *See* 40 CFR part 50, Appendix T, section 3(b).

attainment-year emissions inventories, a SIP-approved nonattainment new source review (NNSR) permitting program that accounts for growth in the area, enforceable emissions limitations and other such control measures, and provides for the implementation of contingency measures. This SIP revision was due within 18 months following the October 4, 2013, effective date of designation (i.e., April 4, 2015). *See* CAA section 191(a). Florida submitted a nonattainment SIP revision to EPA on April 3, 2015.

On July 3, 2017 (82 FR 30749), EPA approved Florida's April 3, 2015, SO₂ nonattainment SIP revision. This SIP revision provided a modeled attainment demonstration and satisfied the required nonattainment planning requirements mentioned above for the Hillsborough County Area. The revision included a base year emissions inventory, a modeling demonstration of attainment for the 2010 SO₂ NAAQS, RACM/Reasonably Available Control Technology (RACT), an RFP plan, NNSR permitting program, and contingency measures for the Hillsborough County Area. As discussed in Sections V and VI, below, the nonattainment SIP revision included permit conditions to reduce SO₂ emissions at Mosaic and Big Bend.

As part of that action, EPA incorporated into the Florida SIP specified SO₂ emissions caps, compliance monitoring, and recordkeeping and reporting requirements for emission units at Mosaic (Permit No. 0570008–080–AC, issued on January 15, 2015) and Big Bend (Permit No. 0570039–074–AC, issued on February 26, 2015). Florida based its modeled attainment demonstration, submitted with its April 3, 2015, nonattainment SIP revision, on these conditions. Big Bend has four emission units (EUs 1 through 4), and Big Bend's permit placed an SO₂ emissions cap on all four units at 3,162 lb/hr on a 30-day boiler operating day average. On December 14, 2018, Florida issued a final air construction permit to Big Bend (Permit No.

0570039–120–AC) that, among other things, restricts two units to the use of natural gas; lowers the four-unit emissions cap from 3,162 lb/hr to 2,156 lb/hr; and modifies monitoring and recordkeeping requirements for EUs 1 and 2.³ Florida’s April 19, 2019, submittal requests that EPA incorporate into the Florida SIP certain permit conditions established in Permit No. 0570039–120–AC. Some of the identified conditions replace specific conditions from Permit No. 0570039–074–AC that EPA approved into the SIP for purposes demonstrating attainment of the SO₂ standard pursuant to the nonattainment requirements of sections 172, 191, and 192 of the CAA.

III. What are the Criteria for Redesignation?

The CAA provides the requirements for redesignating a nonattainment area to attainment. Specifically, section 107(d)(3)(E) of the CAA allows for redesignation provided that the following criteria are met: (1) the Administrator determines that the area has attained the applicable NAAQS; (2) the Administrator has fully approved the applicable implementation plan for the area under section 110(k); (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP and applicable federal air pollutant control regulations, and other permanent and enforceable reductions; (4) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A; and (5) the state containing such area has met all requirements applicable to the area for purposes of redesignation under section 110 and part D of the CAA.

³ Florida incorporated the conditions applicable to Big Bend from Permit No. 0570039-120-AC into the facility’s Title V operating permit on February 8, 2019.

On April 16, 1992 (57 FR 13498), EPA provided guidance on redesignations in the General Preamble for the Implementation of title I of the CAA Amendments of 1990 and supplemented this guidance on April 28, 1992 (57 FR 18070). EPA has provided further guidance on processing redesignation requests in the following documents:

1. “Procedures for Processing Requests to Redesignate Areas to Attainment,” Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (hereinafter referred to as the “Calcagni Memorandum”);
2. “State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines,” Memorandum from John Calcagni, Director, Air Quality Management Division, October 28, 1992;
3. “Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment,” Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994; and
4. “Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions,” Memorandum from Stephen D. Page, April 23, 2014 (hereinafter referred to as the “SO₂ Nonattainment Area Guidance”).

EPA’s SO₂ Nonattainment Area Guidance discusses the CAA requirements that air agencies need to address when implementing the 2010 SO₂ NAAQS in areas designated as nonattainment for the standard. The guidance includes recommendations for air agencies to consider as they develop SIPs to satisfy the requirements of sections 110, 172, 175A, 191, and 192 of the CAA to show future attainment and maintenance of the 2010 SO₂ NAAQS. Additionally, the SO₂ nonattainment guidance provides recommendations for air agencies to

consider as they develop redesignation requests and maintenance plans to satisfy the requirements of sections 107(d)(3)(E) and 175A. If there are no air quality monitors located in the affected area, or there are air quality monitors located in the area but analyses show that none of the monitors are located in the area of maximum concentration,⁴ then air quality dispersion modeling will generally be needed to estimate SO₂ concentrations in the area.

IV. Why is EPA Proposing These Actions?

Through a letter dated June 7, 2018, FDEP submitted a request for EPA to redesignate the Hillsborough County Area to attainment for the 2010 1-hour SO₂ NAAQS and an associated SIP revision containing a maintenance plan. Through a letter dated April 16, 2019, FDEP submitted a revision to the June 7, 2018, redesignation request and SIP revision asking EPA to incorporate certain conditions into the SIP from a recent permit revision applicable to Big Bend. EPA's evaluation indicates that the Hillsborough County Area meets the requirements for redesignation as set forth in section 107(d)(3)(E), including the maintenance plan requirements under section 175A of the CAA. As a result of this evaluation, EPA is proposing to determine that the Area has attained the 2010 1-hour SO₂ NAAQS by its attainment date of October 4, 2018, in accordance with section 179(c)(1) of the CAA, based upon air quality dispersion modeling analyses.⁵ EPA is also proposing to approve Florida's maintenance plan for maintaining the 2010 1-hour SO₂ NAAQS in the Area and incorporate it into the SIP, to redesignate the Hillsborough County Area to attainment for the 2010 1-hour SO₂ NAAQS, and to incorporate certain conditions from the revised Big Bend permit into the SIP because these

⁴ See section VIII.A of the 2014 SO₂ Nonattainment Area Guidance.

⁵ Section 179(c)(1) reads as follows: "As expeditiously as practicable after the applicable attainment date for any nonattainment area, but not later than 6 months after such date, the Administrator shall determine, based on the area's air quality as of the attainment date, whether the area attained the standard by that date."

conditions further reduce SO₂ emissions.

V. Operational Changes to Big Bend's Emission Units

Florida's June 7, 2018, redesignation request and maintenance plan for the Hillsborough County Area relies upon the State's model-based attainment demonstration from its April 3, 2015, SO₂ attainment SIP which EPA approved on July 3, 2017. EPA's approval action incorporated into the Florida SIP a four-unit emissions cap of 3,162 lb/hr on a 30-day boiler operating day average and certain compliance monitoring and recordkeeping and reporting parameters from Permit No. 0570039-074-AC. Florida modeled the Big Bend emissions cap along with the Mosaic SO₂ emissions cap (and other Mosaic permit conditions) to demonstrate attainment of the standard by the attainment date. Florida established the Big Bend emissions cap to demonstrate attainment of the SO₂ standard based on a worst-case operating scenario considering the physical design, heat input, and emissions variability of each unit at Big Bend. To demonstrate compliance with the four-unit cap, Permit No. 0570039-074-AC required each unit to monitor SO₂ emissions with a continuous emission monitoring system (CEMS). The SO₂ emissions cap specified in that permit and the Mosaic permit conditions were the basis for the model-based attainment demonstration in Florida's 2015 nonattainment SIP.

On December 14, 2018, Florida issued a revised air construction permit (Permit No. 0570039-120-AC) to Big Bend that lowers the four-unit emissions cap from 3,162 lb/hr to 2,156 lb/hr; restricts EUs 1 and 2 to only burn natural gas; and since the amount of sulfur in natural gas is negligible, authorizes the removal of the SO₂ CEMS for EUs 1 and 2 and requires monitoring for these two units in accordance with the calculation method allowed for gas-fired acid rain

units in 40 CFR part 75 to demonstrate compliance with the lowered emissions cap.⁶ EUs 1 and 2 share a stack and a flue gas desulfurization (FGD) system to control SO₂. Permit No. 0570039-074-AC required certified CEMS as the method of SO₂ emissions monitoring and compliance for EUs 1 and 2. However, with the restriction on EUs 1 and 2 to burn natural gas in the revised permit, the new method of monitoring and compliance for EUs 1 and 2 utilizes the protocol in 40 CFR Part 75, Appendix D to determine the hourly SO₂ emission rate from each unit. EUs 3 and 4 continue to certify compliance with the emissions cap through use of CEMS. Therefore, Big Bend will demonstrate compliance of the lowered four-unit emissions cap through a combination of 40 CFR Part 75, Appendix D (EUs 1 and 2) and SO₂ CEMS data (EUs 3 and 4). As required by 40 CFR Part 75, Appendix D, section 2.1, Big Bend will measure and record the hourly flow rate of natural gas combusted by EUs 1 and 2 with an in-line fuel flowmeter. The pounds-per-hour SO₂ emission rates for each of these two units will then be calculated by using the equation provided in 40 CFR Part 75, Appendix D, section 3.3.1, along with the measured hourly natural gas flow rate to each unit and the vendor certified sulfur content of the combusted natural gas.

Florida's April 16, 2019, submittal requests that EPA incorporate into the SIP certain conditions from Permit No. 0570039-120-AC. As noted below, some of these conditions replace

⁶ The permit also authorizes additional changes not applicable to this proposed action, including removal of all coal and solid fuels from the list of permitted fuels for EUs 1 and 2 so that the units are no longer subject to the National Emission Standards for Hazardous Air Pollutants for Coal- and Oil-Fired Electric Utility Steam Generating Units in Subpart UUUUU in Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63) (also called the Mercury and Air Toxic Standards (MATS) rule). EUs 008, 015, and 016 will be removed because the units are not necessary for natural gas firing operations. Additionally, this permit authorizes relocation of the existing monitoring points for the nitrogen oxides, carbon dioxide, and ammonia CEMS from the common stack for EUs 1 and 2 to the common inlet duct of the flue gas desulfurization system for these two units. This permit also removes other monitoring requirements for other pollutants and removes the MATS conditions that are no longer applicable because the permit exempts EUs 1 and 2 from MATS requirements.

conditions that EPA incorporated into the SIP from Permit No. 0570039-074-AC in the Agency's July 3, 2017 action approving the State's nonattainment SIP. The conditions identified for incorporation into the SIP from Permit No. 0570039-120-AC are: (1) Section 2, Condition 4 (new) – describing the 40 CFR part 75, Appendix D monitoring methodology and compliance requirements for EUs 1 and 2;⁷ (2) the “SO₂ Emissions Cap” provision from Section 3, Condition 4 (replacement) – setting a four-unit emissions cap of 2,156 lb/hr averaged over a 30-day boiler operating day, requiring that EUs 1 and 2 demonstrate compliance with the cap by monitoring natural gas fuel flow and following the procedures in Appendix D to 40 CFR 75 to determine SO₂ mass emissions, and requiring that EUs 3 and 4 demonstrate compliance with the cap through CEMS;⁸ (3) the “SO₂ CEMS” provision from Section 3, Condition 4 (replacement) – requiring EUs 3 and 4 to use CEMS to demonstrate compliance with the cap and to meet the quality assurance and quality control requirements outlined in the facility's title V permit,⁹ and

⁷ The permit condition states that the permittee shall keep a daily log of natural gas combusted at Units 1 and 2 and shall record the sulfur content of the natural gas as provided by the fuel supplier. The SO₂ mass emissions calculated by following procedures in Appendix D of 40 CFR 75 shall be averaged on a 30-boiler operating day basis to demonstrate the contribution of Units 1 and 2 to the 4-unit SO₂ cap. [Rule 62-4.070(3), F.A.C. and Application No. 0570039-120-AC].

⁸ This permit condition states that the combined emissions of SO₂ from all four-fossil fuel fired steam generating units (EU 001 – EU 004, combined) shall not exceed 2,156 lb/hour based on a 30-boiler operating day rolling average. Units 1 and 2 shall demonstrate compliance with the cap by monitoring the natural gas fuel flow and following procedures in Appendix D of 40 CFR Part 75 to determine SO₂ mass emissions. For Units 3 and 4, compliance with this SO₂ emissions cap shall be demonstrated by data collected from the existing SO₂ CEMS. The new emissions cap applies at all times when these units are operating including periods of startup and shutdown. [Rules 62-4.070(1) and (3), and 62-4.080(1), F.A.C.; Hillsborough County SO₂ Maintenance SIP; and Application No. 0570039-120-AC]. In its April 16, 2019 submittal, Florida identifies this provision as “Section 3, Subsection B, Specific Condition 2”; however, it is contained under the heading “4. Permit Being Modified: Permit No. 0570039-096-AC” in Section 3 of Permit No. 0570039-120-AC.

⁹ This permit condition states that the permittee shall use existing SO₂ CEMS data to demonstrate continuous compliance for Units 3 and 4 with the SO₂ emissions cap specified in Condition 2. The existing SO₂ CEMS shall continue to meet and follow the quality assurance and quality control requirements outline in the facility's Title V air operation permit. [Rules 62-4.070(1) and (3), and 62-4.080(1), F.A.C.; SO₂ Attainment SIP; and Application No. 0570039-120-AC]. In its April 16, 2019 submittal, Florida identifies this provision as “Section 3, Subsection B, Specific Condition 3; however, it is contained under the heading “4. Permit Being Modified: Permit No. 0570039-096-AC” in Section 3 of Permit No. 0570039-120-AC.

(4) the “Methods of Operation” for Units 1 and 2 provision from Section 3, Condition 6 (new) – restricting EUs 1 and 2 to burning only natural gas from a federally regulated pipeline.¹⁰ As discussed in section VI of this notice, Florida’s April 19, 2019, submittal provides even more air quality protection than the model-based attainment plan approved by EPA.

VI. What is EPA’s Analysis of the Redesignation Request and SIP Revision?

The five redesignation criteria provided under CAA section 107(d)(3)(E) are discussed in greater detail for the Hillsborough County Area in the following paragraphs.

Criterion (1) – The Administrator determines that the area has attained the NAAQS.

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has attained the applicable NAAQS (CAA section 107(d)(3)(E)(i)). As discussed in section VIII.A of the SO₂ Nonattainment Area Guidance, there are generally two components needed to support an attainment determination for SO₂, which should be considered interdependently.¹¹ The first component relies on air quality monitoring data. For SO₂, any available monitoring data would need to indicate that all monitors in the affected area are meeting the standard as stated in 40 CFR 50.17 using data analysis procedures specified in 40 CFR part 50, Appendix T. The second component relies on air quality modeling data. If there are no air quality monitors located in the affected area, or there are air quality monitors located in the area, but analyses show that none of the monitors are located in the area of maximum

¹⁰ This permit condition states that Big Ben Units 1 and 2 shall fire only natural gas from a federally regulated pipeline. No solid fuels shall be burned in these units. In its April 16, 2019 submittal, Florida identifies this provision as “Section 3, Subsection A, Specific Condition 3a”; however, it is contained under the heading “6. Permits Being Modified: Permit Nos. 0570039-066-AC & 109-AC” in Section 3 of Permit No. 0570039-120-AC.

¹¹ SO₂ is primarily a localized, source-specific pollutant, and therefore, SO₂ control measures are, by definition, based on what is directly and quantifiably necessary to attain the NAAQS.

concentration,¹² then air quality dispersion modeling will generally be needed to estimate SO₂ concentrations in the area. Such dispersion modeling should be conducted to estimate SO₂ concentrations throughout the nonattainment area using actual emissions and meteorological information for the most recent three calendar years. However, EPA may also make determinations of attainment based on the modeling from the attainment demonstration for the applicable SIP for the affected area, eliminating the need for separate actuals-based modeling to support the determination that an area is currently attaining. If the air agency has previously submitted a modeled attainment demonstration using allowable emissions, no further modeling is needed as long as the source characteristics are still reasonably represented and so long as emissions are at or below allowable levels. Where both monitoring and modeling information is available, such as the case with the Hillsborough County Area, EPA will consider both types of evidence.

Florida's pre- and post-modification attainment demonstration modeling indicates that the only ambient SO₂ monitor in the Area – the East Bay monitor (AQS ID: 12-057-0109) – is not cited in the area of maximum concentration for both Mosaic and Big Bend, and therefore, the clean monitoring data at the monitor does not on its own demonstrate that the Area is currently attaining the 1-hour SO₂ NAAQS. For that reason, EPA's proposed approval of Florida's redesignation and maintenance plan SIP for the Hillsborough County Area is based on the modeled attainment demonstration that includes permanent and enforceable SO₂ controls and emissions limits at Mosaic and Big Bend showing attainment of the 2010 SO₂ standard by the statutory deadline. EPA approved the attainment demonstration for the Area on July 3, 2017,

¹² See section VIII.A of the SO₂ Nonattainment Area Guidance.

and incorporated the new allowable emission rates and control measures into the SIP, making them permanent and enforceable. *See* 82 FR 30749. Florida's redesignation request indicates that the control strategies were fully implemented at Mosaic in November 2017 and at Big Bend in early 2016 (i.e., these sources are emitting SO₂ at or below the SIP-approved allowable emission levels). The revised conditions in Permit No. 0570039-120-AC applicable to Big Bend became effective on December 14, 2018. If EPA approves these revised permit conditions into the SIP, they will become permanent and enforceable measures. As discussed below, EPA proposes to find that these permit revisions continue to assure attainment because, among other things, they reduce the SO₂ emissions cap by approximately 32 percent. Details regarding the control strategies and emissions reductions are provided in the *Criterion (3)* section of this notice. Details regarding the modeling analysis are discussed in the following paragraphs.

Florida's EPA-Approved Modeling Analysis

Florida's modeling analysis was developed in accordance with EPA's Guideline on Air Quality Models (Modeling Guidance)¹³ and the SO₂ Nonattainment Area Guidance and was prepared using EPA's preferred dispersion modeling system – the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) – consisting of the AERMOD (version 14134)¹⁴ model and multiple data input preprocessors as described below. FDEP used regulatory default options and the rural land use designation in the AERMOD modeling.

¹³ *See* 40 CFR Part 51 Appendix W (EPA's *Guideline on Air Quality Models*) (January 17, 2017) located at https://www3.epa.gov/ttn/scram/appendix_w/2016/AppendixW_2017.pdf.

¹⁴ Version 14134 of the AERMOD Modeling System was the current EPA-recommended regulatory version at the time the modeling was performed in 2014-2015, and therefore was appropriate for the modeling analysis.

The pre-processors AERMET (version 14134) and AERMINUTE were used to process five years (i.e., 2008-2012) of 1-minute meteorological data from the Tampa National Weather Service Office (NWS) at the Tampa International Airport, Tampa, Florida, surface level site, based on FDEP's land use classifications, in combination with twice daily upper-air meteorological information from the same site. The Tampa International Airport is located approximately 20 km northwest from the Hillsborough Area.

The AERMOD pre-processor AERMAP (version 11103) was used to generate terrain inputs for the receptors, based on a digital elevation mapping database from the National Elevation Dataset developed by the U.S. Geological Survey. FDEP used AERSURFACE to generate direction-specific land-use surface characteristics for the modeling.

The stack heights used in the modeling meet the Good Engineering Practice stack height criteria and the Building Profile Input Program for Plume Rise Model Enhancements was used to generate direction-specific building downwash parameters. FDEP developed a Cartesian receptor grid across the entire Area (extending up to 8.5 km from the monitor), with 100 meter spacing in ambient air to ensure that maximum concentrations are captured in the analysis.

FDEP selected a background SO₂ concentration based on local SO₂ monitoring data from the East Bay monitor for the period January 2012 to December 2013. This background concentration from the nearby ambient air monitor is used to account for SO₂ impacts from all sources that are not specifically included in the AERMOD modeling analysis. The ambient monitoring data was obtained from the Florida Air Monitoring and Assessment System. Due to its close proximity to Mosaic and Big Bend, monitored concentrations at this station are strongly influenced by emissions from both facilities. As a result, and as allowed by EPA's Modeling

Guideline, the data was filtered to remove measurements where the wind direction could transport pollutants from Mosaic and Big Bend to the monitor. More specifically, the data was filtered to remove measurements where hourly wind directions were between 275° to 4° or 153° to 241°.

EPA's SO₂ Nonattainment Area Guidance provides a procedure for establishing longer-term averaging times for SO₂ emission limits (up to a 30-day rolling averaging time).¹⁵ In approving Florida's 2015 attainment demonstration, EPA concluded that FDEP completed this analysis for both Mosaic and Big Bend to derive a SIP emission limit with a block 24-hour longer-term averaging time and a rolling 30-day longer-term averaging time, respectively, that are comparatively stringent to the 1-hour limit. For more details, see Florida's April 3, 2015, nonattainment SIP submittal and EPA's final approval. *See* 82 FR 30749 (July 3, 2017).¹⁶

The results of Florida's attainment modeling are summarized in Table 1. Table 1 presents the results from the six sets of AERMOD modeling runs that were performed. The six modeling runs were the result of using an uncontrolled, or pre-modification, scenario and five different controlled, or post-modification, scenarios to account for possible control strategies that involved two-unit and three-unit emissions caps at Mosaic, in addition to individual emissions caps. The model also included the 3,162 lbs/hr emissions cap at Big Bend. The four Big Bend units were modeled at constant emissions rates derived by distributing the emissions cap based on the relative maximum allowable heat input for each unit. Maximum allowable permitted emissions caps were used for the modeling demonstration. These emissions limits and other

¹⁵ FDEP followed EPA's SO₂ Nonattainment Area Guidance on procedures for establishing emissions limits with averaging periods longer than 1 hour.

¹⁶ Florida's nonattainment SIP submittal is located in Docket No. EPA-R04-OAR-2015-0624.

control measures were established in construction permits issued by FDEP. EPA incorporated the permit conditions necessary to demonstrate modeled attainment into the Florida SIP via the approved attainment plan making them permanent and enforceable. Florida incorporated the conditions applicable to Big Bend from Permit No. 0570039-074-AC into the facility's Title V operating permit¹⁷ and will incorporate the conditions for Mosaic into the next Title V revision for that facility.

As noted above, Florida's modeling presents five post-control modeling runs, summarized in Table 1, which were used by FDEP to identify the worst possible scenario of emissions distributions between Mosaic's three sulfuric acid Emissions Units (EUs) 004-006. FDEP began by evaluating maximum sulfuric acid production rates and catalyst limitations, which resulted in a total SO₂ emissions cap of 600 pounds per hour (lb/hr) for Mosaic EUs 004-006. This overall cap was then scaled to a 24-hour limit, maintaining comparative stringency with the 1-hour limit, following the procedures in the SO₂ Nonattainment Guidance. The 24-hour emissions rate resulting from this procedure is 577.8 lb/hr. FDEP rounded down the limit for an additional buffer for the maximum modeled impact, resulting in a 24-hour limit of 575 lb/hr. FDEP then back-calculated to a 1-hour critical emission value (CEV) emissions cap of 597 lb/hr. This three-unit emissions cap was then modeled in several configurations to mimic variability in emissions possible under the scenario of all three units operating simultaneously. The different configurations were determined by apportioning the emissions cap (597 lb/hr) based on each unit emitting at its individual emissions limit with the remainder of the cap

¹⁷ See Title V Operating Permit No. 0570039-110-A V issued by FDEP on November 7, 2017.

distributed to the other two units based on their relative production capacities. The highest impact is presented in Table 1 as the three-unit emissions cap scenario.

FDEP also evaluated two-unit emissions caps, which assumed that only two of the three units were operating. The six possible two-unit operating scenarios were evaluated in turn by modeling each unit operating at its individual emission limit, while the remainder of the 597 lb/hr cap was distributed to the other operating unit. The highest modeled impact is presented in Table 2 as the two-unit operating scenario. For the three remaining scenarios, each sulfuric acid plant was assumed to operate alone at its individual emissions cap. For all of the modeling scenarios, the four Big Bend units were modeled at constant emissions rates derived by distributing the 1-hour CEV emissions cap¹⁸ based on the relative maximum allowable heat input for each unit. The results for each of these scenarios are also presented in Table 1. Table 1 shows that the maximum 1-hour average across all five years of meteorological data (2008-2012) is less than or equal to the 2010 1-hour SO₂ NAAQS of 75 ppb for the five post-control AERMOD modeling runs. For more details, see Florida's April 3, 2015, nonattainment SIP submittal.

¹⁸ The details of Florida's procedures for developing the 1-hour CEV and longer-term average emissions limits are provided in its April 3, 2015, nonattainment SIP submittal.

Table 1. Maximum Modeled SO₂ Impacts in the Hillsborough Area, Micrograms per Cubic Meter (ppb)

| Model scenario | Averaging time | Maximum predicted impact | | Background | Total | SO ₂ NAAQS |
|------------------|----------------|--------------------------|------------------|-------------|-------------------|-----------------------|
| | | Mosaic | Big Bend | | | |
| Pre-modification | 1-hour | 425.50 (162.4) | 0.82 (0.31) | 20.40 (7.8) | 446.72 (170.5) | 196.4 (75) |
| Three-unit | 1-hour | 118.90 (45.4) | 55.90 (21.3) | 21.44 (8.2) | 196.24 (74.9) | |
| Two-unit | 1-hour | 123.59 (47.2) | 52.22 (19.9) | 18.83 (7.2) | 194.65 (74.3) | |
| EU 004 only | 1-hour | 0.33 (0.12) | 170.84 (65.2) | 17.26 (6.6) | 188.43 (71.9) | |
| EU 005 only | 1-hour | 0.25 (0.10) | 170.84 (65.2) | 17.26 (6.6) | 188.35 (71.9) | |
| EU 006 only | 1-hour | 0.33 (0.12) | 170.84 (65.2) | 17.26 (6.6) | 188.43 (71.9) | |

The pre-control analysis resulted in a predicted impact of 170.5 ppb. The post-control analysis resulted in a worst-case predicted impact of 74.9 ppb in the three-unit operating scenario. EPA determined that the modeling results indicate sufficient reductions in air quality impact with the implementation of the post-construction control plan for Mosaic and Big Bend. The control measures that have been implemented at the Mosaic and Big Bend are outlined in the *Criterion (3)* section of this notice. The collective emission limit and related compliance parameters have been incorporated into the SIP, making them permanent and federally enforceable. More details on the pre-construction and post-construction operations at the facilities are included in Florida's nonattainment SIP submission and in EPA's rulemaking on that submittal.¹⁹

¹⁹ See 82 FR 30749 (July 3, 2017) (final rule), 81 FR 57522 (August 23, 2016) (proposed rule), and Florida's SIP submittal located in Docket EPA-R04-OAR-2015-0624.

On July 3, 2017, EPA approved the modeled attainment demonstration described above and concluded that it is consistent with CAA requirements, EPA's Modeling Guideline, and EPA's guidance for SO₂ attainment demonstration modeling. Florida's redesignation request indicates that the control strategies were fully implemented at Mosaic in November 2017 and at Big Bend in early 2016, meaning that emissions are at or below the levels modeled in Florida's attainment plan. Therefore, EPA proposes to find that air quality modeling supports the conclusion that the Area has attained the 2010 1-hour SO₂ NAAQS and attained the standard by the applicable deadline.

Effect of the Big Bend Permit Revisions on Florida's EPA-Approved Modeling Analysis

As discussed above, since the time that EPA approved Florida's attainment demonstration modeling on July 3, 2017, Florida issued a revised permit to Big Bend that restricts EUs 1 and 2 to only burning natural gas; reduces the four-unit SO₂ cap from 3,162 lb/hr to 2,156 lb/hr (each on a 30-day average basis); and amends the method for demonstrating compliance with the four-unit cap. Florida's April 19, 2019, submittal revises its pending June 7, 2018, redesignation request and associated SIP revision for the Hillsborough County Area by asking EPA to incorporate the aforementioned permit conditions into the SIP. Florida's 2019 submittal states that its model-based attainment demonstration (described above) is still valid for demonstrating attainment in the Area. Florida's conclusion is based on the approximate 32 percent reduction in the four-unit cap and the change in stack parameters for the stack shared by EUs 1 and 2 due to the switch to natural gas. According to the State, the plume flowrate, exit velocity, and temperature for the stack shared by EUs 1 and 2 have all increased. Florida's submittal also asserts that a faster flowrate and velocity leaving the stack will lead to increased

plume rise and that the warmer temperatures will also increase plume rise. With increased plume rise, pollutants will be able to disperse more before reaching the ground and will lead to lower pollutant concentrations at the surface. Therefore, Florida believes that the new stack parameters for the shared stack of EUs 1 and 2, along with the reduced SO₂ emissions cap, would lead to lower modeled concentrations.

Florida's submittal also notes that the stack parameters for EUs 3 and 4 have not changed from the values used in the modeling demonstration. The stack configuration for EUs 1 through 4, which have stack heights of 150 meters, are spaced less than 120 meters apart and are over 2 kilometers (km) from the Area, which according to the State, leads to the stacks behaving as a single, distant point source for receptors within the Area. The submittal also asserts that any potential emissions scenario with the revised cap would be expected to lead to decreased modeled concentrations due to the overall decrease in emissions from the four EUs due to the revised four-unit SO₂ cap.

EPA proposes to agree with Florida's assessment and conclusion regarding the effect of the revised Big Bend permit conditions on the State's model-based attainment demonstration. EPA believes that Florida's modeling, which showed that Big Bend's maximum impact was 87% of the NAAQS at 170.84 µg/m³ (see Table 1) and demonstrated attainment of the 2010 SO₂ NAAQS using a four-unit SO₂ cap of 3,162 lb/hr, is more conservative (in relation to a demonstration relying on the lowered cap) and is still valid for demonstrating attainment in the Area.

Monitoring Data

For SO₂, a location may be considered to be attaining the 2010 1-hour SO₂ NAAQS if it meets the NAAQS as determined in accordance with 40 CFR 50.17 and Appendix T of part 50, based on three complete, consecutive calendar years of quality-assured air quality monitoring data. Specifically, to attain the NAAQS at each monitoring site, the 3-year average of the annual 99th percentile (fourth highest value) of 1-hour daily maximum concentrations measured at each monitor within an area must be less than or equal to 75 ppb. The data must be collected and quality-assured in accordance with 40 CFR part 58 and recorded in the EPA Air Quality System (AQS). The monitors should have remained at the same location for the duration of the monitoring period required for demonstrating attainment.

As discussed above, FDEP currently operates one ambient SO₂ monitor in the Area, the East Bay monitor. This monitor is located approximately 1 km southeast of Mosaic and 7 km north of Big Bend. The original nonattainment designation was based on the 2009-2011 design value of 103 ppb at this monitor. As shown in Table 2, the design values at this monitor have decreased steadily since 2011.

Table 2. Hillsborough County Area SO₂ Monitored Design Values (ppb)

| Monitoring Station (AQS Site ID) | 2011-2013 Design Value | 2012-2014 Design Value | 2013-2015 Design Value | 2014-2016 Design Value | 2015-2017 Design Value²⁰ | 2016-2018 Design Value |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--|-------------------------------|
| East Bay (12-057-0109) | 93 ppb | 79 ppb | 66 ppb | 66 ppb | 60 ppb | Incomplete ²¹ |

²⁰ The 2017 data is available at <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>.

²¹ The East Bay monitor did not collect a valid 2016-2018 design value due to incomplete data in 2018.

Quality-assured and certified ambient air monitoring data for the 2015-2017 period, the most recent 3-year period with complete data, are attaining the 2010 1-hour SO₂ NAAQS with a design value of 60 ppb. This design value is approximately 43 percent lower than the 2009-2011 design value and 40 percent lower than the NAAQS. Although the 2016-2018 design value is invalid due to incomplete data in 2018, EPA has no reason to believe that the 2016-2018 design value would have been above the NAAQS if the monitor had complete data for 2018 given the downward trend in emissions shown in Table 2 and a 2015-2017 design value that is 40 percent lower than the NAAQS. Furthermore, since 2013, the annual 99th percentile daily maximum 1-hour SO₂ concentration has remained below the standard, and there have been no 1-hour values recorded above the level of the standard since late 2016. EPA believes that the significant decrease in SO₂ concentrations is due to the permanent and enforceable control measures at Mosaic and Big Bend. Thus, the monitoring data also support the conclusion that the Area has attained the standard.

EPA is proposing to determine that the Area has attained the 2010 1-hour SO₂ NAAQS based on the modeling analysis discussed above which is not contradicted by monitoring data. Preliminary monitoring data for the Area for 2019 indicates that the Area continues to attain the standard and has not measured any exceedances of the 1-hour SO₂ standard.²² If, before EPA takes final action, monitoring data or other evidence causes EPA to conclude that the Area is not continuing to meet the standard, EPA will not go forward with the redesignation. As discussed in more detail below, Florida has committed to continue monitoring ambient SO₂ concentrations in this Area in accordance with 40 CFR part 58. Any future changes to the state or local air

²² Preliminary 2019 data is available at <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>.

monitoring station network in the Area will be submitted to EPA for approval in Florida's annual ambient air monitoring network plan, as required by 40 CFR 58.10.

Criterion (2) – The Administrator has fully approved the applicable implementation plan for the area under section 110(k); and Criterion (5) – Florida has met all applicable requirements under section 110 and part D of title I of the CAA.

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the state has met all applicable requirements under section 110 and part D of title I of the CAA (CAA section 107(d)(3)(E)(v)) and that the state has a fully-approved SIP under section 110(k) for the area (CAA section 107(d)(3)(E)(ii)). EPA proposes to find that Florida has met all applicable SIP requirements for the Hillsborough County Area under section 110 of the CAA (general SIP requirements) for purposes of redesignation. Additionally, EPA proposes to find that the Florida SIP satisfies the criterion that it meets applicable SIP requirements for purposes of redesignation under part D of title I of the CAA in accordance with section 107(d)(3)(E)(v). Further, EPA proposes to determine that the SIP is fully approved with respect to all requirements applicable for purposes of redesignation in accordance with section 107(d)(3)(E)(ii). In making these proposed determinations, EPA ascertained which requirements are applicable to the Area and, if applicable, that they are fully approved under section 110(k). SIPs must be fully approved only with respect to requirements that were applicable prior to submittal of the complete redesignation request.

A. *The Hillsborough County Area has met all applicable requirements under section 110 and part D of the CAA.*

1. *General SIP requirements.*

General SIP elements and requirements are delineated in section 110(a)(2) of title I, part A of the CAA. These requirements include, but are not limited to, the following: submittal of a SIP that has been adopted by the state after reasonable public notice and hearing; provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; implementation of a source permit program; provisions for the implementation of part C requirements (Prevention of Significant Deterioration (PSD)) and provisions for the implementation of part D requirements (NNSR permit programs); provisions for air pollution modeling; and provisions for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement this provision, EPA has required certain states to establish programs to address the interstate transport of air pollutants. The section 110(a)(2)(D) requirements for a state are not linked with a particular nonattainment area's designation and classification in that state. EPA believes that the requirements linked with a particular nonattainment area's designation and classifications are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, EPA does not believe that the CAA's

interstate transport requirements should be construed to be applicable requirements for purposes of redesignation.

In addition, EPA interprets the other section 110(a)(2) elements that are neither connected with nonattainment plan submissions nor linked with an area's attainment status not to be "applicable" requirements for purposes of redesignation. The area will still be subject to these requirements after the area is redesignated. The section 110 and part D requirements which are linked with a particular area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This approach is consistent with EPA's existing policy on applicability (i.e., for redesignations) of conformity and oxygenated fuels requirements, as well as with section 184 ozone transport requirements. *See* Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174-53176, October 10, 1996), (62 FR 24826, May 7, 2008); Cleveland-Akron-Loraine, Ohio, final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida, final rulemaking at (60 FR 62748, December 7, 1995). *See also* the discussion on this issue in the Cincinnati, Ohio, redesignation (65 FR 37890, June 19, 2000), and in the Pittsburgh, Pennsylvania, redesignation (66 FR 50399, October 19, 2001). Nonetheless, EPA has approved Florida's SIP revisions related to the section 110 requirements for the 2010 SO₂ NAAQS, with the exception of the interstate transport elements at section 110(a)(2)(D)(i)(I). *See* 81 FR 67179 (September 30, 2016).

2. *Title I, Part D, applicable SIP requirements.*

Subpart 1 of part D, comprised of CAA sections 171-179B, sets forth the basic nonattainment requirements applicable to all nonattainment areas. All areas that were designated nonattainment for the SO₂ NAAQS were designated under Subpart 1 of the CAA in accordance

with the deadlines in Subpart 5. For purposes of evaluating this redesignation request, the applicable Subpart 1 SIP requirements are contained in section 172(c)(1)-(9), section 176, and sections 191 and 192. A thorough discussion of the requirements contained in sections 172(c) can be found in the General Preamble for Implementation of Title I. *See* 57 FR 13498 (April 16, 1992).

a. Subpart 1 Section 172 Requirements.

Section 172 requires states with nonattainment areas to submit plans providing for timely attainment and meeting a variety of other requirements. As discussed in section V.A, above, EPA's longstanding interpretation of the attainment-related nonattainment planning requirements of section 172 is that once an area is attaining the NAAQS, those requirements are not "applicable" for purposes of CAA section 107(d)(3)(E)(ii) and therefore need not be approved into the SIP before EPA can redesignate the area. In the 1992 General Preamble for Implementation of Title I, EPA set forth its interpretation of applicable requirements for purposes of evaluating redesignation requests when an area is attaining a standard. *See* 57 FR 13498, 13564 (April 16, 1992). EPA noted that the requirements for RFP and other measures designed to provide for attainment do not apply in evaluating redesignation requests because those nonattainment planning requirements "have no meaning" for an area that has already attained the standard. *Id.* This interpretation was also set forth in the Calcagni Memo.

As discussed above, EPA previously approved Florida's nonattainment SIP for the Hillsborough County Area. *See* 82 FR 30749 (July 3, 2017). Among other things, the nonattainment SIP for the Area satisfied the section 172(c)(1) requirements for RACT/RACM; 172(c)(2) requirements related to RFP; 172(c)(3) requirements for a comprehensive and accurate

emissions inventory; 172(c)(6) requirements for enforceable control measures necessary to provide attainment of the NAAQS by the attainment date; and section 172(c)(9) requirements for contingency measures.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources to be allowed in an area, and section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA has a longstanding interpretation that because NNSR is replaced by PSD upon redesignation, nonattainment areas seeking redesignation to attainment need not have a fully approved part D NNSR program in order to be redesignated. See memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled “Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment.” Florida currently has a fully-approved PSD and part D NNSR program in place in Chapters 62-204, 62-210, and 62-212 of the Florida Administrative Code. Florida’s PSD program will become effective in the Area upon redesignation to attainment.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, EPA believes that the Florida’s SIP meets the requirements of section 110(a)(2) applicable for purposes of redesignation.

Finally, Section 172(c)(8) allows a state to use equivalent modeling, emission inventory, and planning procedures if such use is requested by the state and approved by EPA. Florida has not requested the use of equivalent techniques under section 172(c)(8).

As mentioned above, EPA fully approved Florida’s April 3, 2015, nonattainment SIP for the Hillsborough County Area, including the model-based attainment demonstration, and

determined that the SIP submission met the applicable nonattainment planning requirements of sections 172 and 191-192 of the CAA demonstrating attainment of the SO₂ standard by the statutory deadline. This approval included the specific SO₂ emissions caps and compliance monitoring established for the two SO₂ point sources impacting the Hillsborough County Area (Mosaic and Big Bend) and included in the 2015 SIP revision.

b. Subpart 1 Section 176 - Conformity Requirements.

Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs, and projects that are developed, funded, or approved under title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to all other federally supported or funded projects (general conformity). State transportation conformity SIP revisions must be consistent with federal conformity regulations relating to consultation, enforcement, and enforceability that EPA promulgated pursuant to its authority under the CAA.

EPA believes that it is reasonable to interpret the conformity SIP requirements²³ as not applying for purposes of evaluating the redesignation request under section 107(d) because state conformity rules are still required after redesignation and federal conformity rules apply where state rules have not been approved. *See Wall v. EPA*, 265 F.3d 426 (upholding this interpretation) (6th Cir. 2001); 60 FR 62748 (December 7, 1995). Furthermore, due to the

²³ CAA Section 176(c)(4)(E) requires states to submit revisions to their SIPs to reflect certain federal criteria and procedures for determining transportation conformity. Transportation conformity SIPs are different from the motor vehicle emission budgets that are established in control strategy SIPs and maintenance plans.

relatively small, and decreasing, amounts of sulfur in gasoline and on-road diesel fuel, EPA's transportation conformity rules provide that they do not apply to SO₂ unless either the EPA Regional Administrator or the director of the state air agency has found that transportation-related emissions of SO₂ as a precursor are a significant contributor to a SO₂ or fine particulate matter (PM_{2.5}) nonattainment problem, or if the SIP has established an approved or adequate budget for such emissions as part of the RFP, attainment, or maintenance strategy. *See* 40 CFR 93.102(b)(1), (2)(v); SO₂ Nonattainment Area Guidance. Neither of these conditions have been met; therefore, EPA's transportation conformity rules do not apply to SO₂ for the Area. For these reasons, EPA proposes to find that Florida has satisfied all applicable requirements for purposes of redesignation of the Hillsborough County Area under section 110 and part D of title I of the CAA.

B. The Hillsborough County Area has a fully approved applicable SIP under section 110(k) of the CAA.

EPA has fully approved the applicable Florida SIP for the Hillsborough County Area under section 110(k) of the CAA for purposes of redesignation. EPA may rely on prior SIP approvals in approving a redesignation request (*see* Calcagni Memorandum at p. 3, *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989-90 (6th Cir. 1998); *Wall*, 265 F.3d 426) plus any additional measures it may approve in conjunction with a redesignation action. *See* 68 FR 25426 (May 12, 2003) and citations therein. As mentioned above, EPA fully approved the State's nonattainment SIP and approved Florida's SIP revisions related to the section 110 requirements for the 2010 SO₂ NAAQS, with the exception of the interstate transport

elements at section 110(a)(2)(D)(i)(I). *See* 82 FR 30749 (July 3, 2017) and 81 FR 67179 (September 30, 2016), respectively.

As discussed above, EPA believes that the section 110 elements that are neither connected with nonattainment plan submissions nor linked to an area's nonattainment status are not applicable requirements for purposes of redesignation.

Criterion (3) – The air quality improvement in the Hillsborough County Area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable reductions.

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP, applicable Federal air pollution control regulations, and other permanent and enforceable reductions (CAA section 107(d)(3)(E)(iii)). EPA proposes to determine that Florida has demonstrated that the observed air quality improvement in the Hillsborough County Area is due to permanent and enforceable reductions in SO₂ emissions resulting from implementation of the SIP, including the SO₂ control measures at Mosaic and Big Bend incorporated therein.

When EPA designated the Hillsborough County Area as a nonattainment area for the 2010 1-hour SO₂ NAAQS, EPA determined that operations at Mosaic were the primary cause of the 2010 1-hour SO₂ NAAQS violations in the Area. *See* 78 FR 47191.²⁴ However, Florida

²⁴ *See* Final Technical Support Document, July 2013, Florida First Round of Nonattainment Area Designations for the 2010 SO₂ Primary NAAQS, Prepared by EPA Region 4. This document is available at Docket ID: EPA-HQ-OAR-2012-0233-0307.

included the nearby Big Bend power plant in its model-based attainment demonstration because it determined that Big Bend was also a significant contributor to elevated concentrations within the Area.²⁵ Florida's April 3, 2015, nonattainment SIP revision was based on this determination and successfully reduced ambient concentrations below the 1-hour SO₂ NAAQS by only requiring emissions reductions at Mosaic and Big Bend.

Mosaic received an air construction permit²⁶ on January 15, 2015, from FDEP requiring Mosaic to construct and implement SO₂ emission control measures and limitations, according to a specific compliance schedule, necessary to ensure attainment of the SO₂ NAAQS as expeditiously as practicable. Mosaic produces fertilizers, sulfuric acid, phosphoric acid, and fluoridation ingredients and emits SO₂ from three main emissions units – sulfuric acid plants (SAPs) Nos. 7 (EU 004), 8 (EU 005) and 9 (EU 006). *See* 82 FR 30749 (July 3, 2017). The air construction permit authorized Mosaic to: replace the vanadium catalyst (used to convert SO₂ to sulfuric trioxide) for each SAP (Nos. 7, 8, and 9) with a more efficient catalyst for improved performance;²⁷ increase the stack height at each SAP;²⁸ eliminate the use of fuel oil at the plant except during periods of natural gas curtailment or disruption; and comply with specific SO₂ emissions caps for two-unit (550 lb/hr) and three-unit (575 lb/hr) operating scenarios based on

²⁵ FDEP modeled actual emissions at the time of area designations which revealed contributing impacts throughout the nonattainment area due to emissions from Big Bend. *See* 82 FR 30749 (July 3, 2017) and Docket ID: EPA-R04-OAR-2015-0623.

²⁶ *See* Air Construction Permit (No. 0570008-080-AC) issued by FDEP on January 15, 2015, located in the docket for this proposed action.

²⁷ Improvements in catalyst efficiency allow the units to meet the multi-unit caps incorporated into the Florida SIP by converting more SO₂ emissions formed during the manufacturing process to sulfuric acid, improving the efficiency of the manufacturing process, and reducing SO₂ emissions.

²⁸ A stack height increase can result in greater plume dispersion across an area, minimizing stagnation and local impacts from higher concentrations, primarily due to the avoidance of building downwash effects. *See* EPA's June 1985 guidance document, "Guideline for Determination of Good Engineering Practice Stack Height (Technical Support Document for the Stack Height Regulations)," which can be found at: <http://www3.epa.gov/scram001/guidance/guide/gep.pdf>.

24-hour block averages as determined by continuous emission monitoring system (CEMS) data.²⁹ The new catalyst replacement converts more SO₂ for process purposes, allowing Mosaic to meet more stringent emissions limits for these units. Allowable SO₂ emissions (from SAPs 7-9 combined) were estimated to be reduced from 1,140 lb/hr (based on total individual unit emission limits) to a maximum of 575 lb/hr, representing at least a 50 percent allowable emissions decrease. The stack heights for all three sulfuric acid plants were increased from 45.7 to 65 meters (213.5 feet); thus, the new heights are fully creditable in accordance with EPA's stack height regulations. EPA incorporated these new emissions limits, operating parameters, compliance monitoring, and recordkeeping and reporting requirements into the Florida SIP on July 3, 2017, making them permanent and enforceable. *See* 82 FR 30749 (July 3, 2017). Florida's redesignation request indicates that the control strategies were fully implemented at the Mosaic facility in November 2017.

²⁹ SAPs 7, 8, and 9 are also subject to the existing, individual SO₂ emission limits that were previously adopted into Florida's SIP (including SAP 7 – 400 lbs/hr, 24-hour average; SAP 8 – 315 lbs/hr, 24-hour average; SAP 9 – 425 lbs/hr, 24-hour average).

Table 3. Mosaic Facility SO₂ Source Changes

| Source | SO ₂ Emission Limit (lb/hr)* | | | | Stack Height (m) | |
|--|---|---|---|---------------------------------------|------------------|------|
| | Previous | Individual | 2-unit | 3-unit | | |
| SAP 7 | 400 | 400 | Any two units cannot exceed 550 combined. | Combined emissions cannot exceed 575. | 45.7 | 65.0 |
| SAP 8 | 315 | 315 | | | 45.7 | 65.0 |
| SAP 9 | 425 | 425 | | | 45.7 | 65.0 |
| No. 6 AP Plant | 40.2 | Mosaic was required to cease burning of fuel oil at all units. This essentially eliminated SO ₂ emissions from these five units. | | | No changes. | |
| No. 5 Granulation Plant | 20.1 | | | | | |
| No. 1 AFI Plant | 45.0 | | | | | |
| No. 2 AFI plant | 45.0 | | | | | |
| Auxiliary Boiler | 65.3 | | | | | |
| *All previous and new SO ₂ emission limits are 24-hour block averages | | | | | | |

For Big Bend, FDEP issued Permit No. 0570039-074-AC on February 26, 2015, requiring the facility to comply with a SO₂ emissions cap of 3,162 lb/hr based on a 30-day rolling average for all four units as determined by CEMS data.³⁰ This involved replacing all existing No. 2 fuel igniters and associated equipment to allow all four units to fire natural gas during startup, shutdown, and flame stabilization. These enhancements allowed Big Bend to meet the new combined unit emissions cap beginning June 1, 2016. Big Bend's combined allowable SO₂ emissions were reduced from 6,587.6 lb/hr (based on total individual unit emission limits) to 3,162 lb/hr, representing a 52 percent decrease in allowable emissions. EPA

³⁰ See Air Construction Permit 0570039-074-AC issued by FDEP on February 26, 2015, located in the docket for this proposed action.

incorporated the emissions cap, operating parameters, compliance monitoring, and recordkeeping and reporting requirements into the Florida SIP on July 3, 2017, making them permanent and enforceable. *See* 82 FR 30749 (July 3, 2017). Florida's redesignation request indicates that the control strategies were fully implemented at Big Bend in early 2016. FDEP incorporated the permit conditions into Big Bend's title V operating permit (No. 0570039-110-AV)³¹ on November 7, 2017.

The nonattainment SIP submittal estimated base year 2011 SO₂ emissions from Big Bend of 9,105.93 tons and from Mosaic of 3,034.06 tons. Big Bend's previous allowable limit was 29,033.79 tons per year. Mosaic's previous allowable limit was 4,993.2 tons per year. The attainment year maximum allowable emissions are 2,518.5 and 13,866 tons per year for Mosaic and Big Bend, respectively, a reduction of approximately 50 percent. Actual SO₂ emissions from Mosaic and Big Bend decreased by 7,253 tons (approximately 54 percent) from 2014 to 2017³² which corresponds with the overall downward trend in monitored daily maximum 1-hour ambient SO₂ concentrations³³ (with no values measured above the standard in 2017). The air quality improvement in the Hillsborough County Area is due to permanent and enforceable reductions in SO₂ emissions resulting from these control measures incorporated into the SIP.

As discussed above, Florida issued a revised permit to Big Bend (Permit No. 0570039-120-AC) that restricts EUs 1 and 2 to only burning natural gas; reduces the four-unit SO₂ cap from 3,162 lb/hr to 2,156 lb/hr (each on a 30-day average); and amends the method of

³¹ *See* Title V operating permit 0570039-110-A V issued by FDEP on November 7, 2017, located in the docket for this proposed action.

³² *See* Figure 5 in Florida's June 7, 2018, submission.

³³ *See* Figure 2 in Florida's June 7, 2018, submission.

compliance for the revised four-unit cap. Table 4 summarizes the changes in the SO₂ emissions limits at Big Bend.

Table 4. Big Bend SO₂ Emissions Limit Changes

| Source | SO ₂ Emissions Limit (lb/hr)* | | |
|--|--|---|--|
| | Previous | Permit No. 0570039-074-AC (Effective June 1, 2016) | Permit No. 0570039-120-AC (Effective December 14, 2018) |
| FFSG Unit 1 | 1,009.25 | Four-unit emissions cap of 3,162 (originally 6,587.6 total) | Four-unit emissions cap of 2,165 |
| FFSG Unit 2 | 999.00 | | |
| FFSG Unit 3 | 1,028.75 | | |
| FFSG Unit 4 | 3,550.60 | | |
| *All SO ₂ emission limits are 30-day rolling averages | | | |

The revised four-unit emissions cap of 2,165 lb/hr proposed for incorporation into the SIP represents a nearly 32 percent reduction from the SIP-approved emissions cap. This lowered emissions cap will become permanent and enforceable if EPA incorporates it into the SIP.

Criterion (4) – The Hillsborough County Area has a fully approved maintenance plan pursuant to section 175A of the CAA.

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has a fully approved maintenance plan pursuant to section 175A of the CAA. *See* CAA section 107(d)(3)(E)(iv). In conjunction with its request to redesignate the Hillsborough County Area to attainment for the 2010 1-hour SO₂ NAAQS, Florida submitted a SIP revision to provide for the maintenance of the 2010 1-hour SO₂ NAAQS for at least 10 years after the effective date of redesignation to attainment. EPA is proposing to determine that this maintenance plan meets the requirements for approval under section 175A of the CAA.

a. What is required in a maintenance plan?

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after the Administrator approves a redesignation to attainment. Eight years after the redesignation, the state must submit a revised maintenance plan demonstrating that attainment will continue to be maintained for the 10 years following the initial 10-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures as EPA deems necessary to assure prompt correction of any future 2010 1-hour SO₂ violations. The Calcagni Memorandum provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five requirements: the attainment emissions inventory; maintenance demonstration; monitoring; verification of continued attainment; and a contingency plan. As is discussed more fully below, EPA is proposing to determine that Florida's maintenance plan includes all the necessary components and is thus proposing to approve it as a revision to the Florida SIP.

b. Attainment Emissions Inventory

An attainment inventory identifies a level of emissions in the Area that is sufficient to attain the NAAQS. In its maintenance plan, Florida used 2015 actual emissions data to represent the attainment emissions inventory. As identified above, the 2015-2017 design value at the East Bay monitor was below the NAAQS and there has not been a monitored violation of the SO₂ NAAQS at the monitor since 2014. SO₂ emissions data from the Mosaic, Big Bend, Ajax, and Harsco facilities,³⁴ as included in Florida's required 2015 annual operating reports for all

³⁴ Ajax and Harsco are two smaller point sources within the Area. See footnote 1 for additional information.

sources, are presented in Table 5. Although Big Bend is located outside of the Area, Florida included it in its model-based attainment demonstration because it determined that it was a significant contributor to elevated concentrations within the Area. The complete attainment emissions inventory for the Area and relevant nearby stationary sources (i.e., Big Bend) is presented in Table 6. Florida based area and non-road emissions for the Area on 2014 National Emissions Inventory (NEI) data for Hillsborough County because the State is only required to develop these inventories on a triennial period in accordance with the NEI and subpart A to 40 CFR part 51. The 2014 emissions for each category were projected to 2015 based on the increase in the Hillsborough County population from 2014 to 2015, and then allocated to the Area based on the Area's fraction of land area within the county. The State estimated on-road emissions for the Area with MOVES2014a, and similarly allocated to the Area based on the Area's fraction of land area within the county.

Table 5. 2015 SO₂ Emissions Inventory for Big Bend, Mosaic, Ajax, and Harsco Facilities

| Big Bend Facility SO₂ Emissions | | |
|---|--|---|
| EU ID | Unit Description | 2015 SO₂ Emissions (tons) |
| 1 | Fossil Fuel Fired Steam Generator Unit No. 1 | 1804.89 |
| 2 | Fossil Fuel Fired Steam Generator Unit No. 2 | 1324.81 |
| 3 | Fossil Fuel Fired Steam Generator Unit No. 3 | 1819.60 |
| 4 | Fossil Fuel Fired Steam Generator Unit No. 4 | 2366.10 |
| 41 | SCCT 4A: PWPS FT8-3 SwiftPac CT/Gen Peaking Unit | 0.01 |
| 42 | SCCT 4B: PWPS FT8-3 SwiftPac CT/Gen Peaking Unit | 0.01 |
| 43 | SCCT Black Start Emergency Engine (1,495 HP) | 0.0004 |
| 44 | Emergency Diesel Generator (1,046 HP) | 0.0003 |
| 45 | Emergency Diesel Generator and Fire Pump Diesel Engine | 0.0003 |
| 51 | Process Heaters (2-6 MMBtu/hour) | 0.0007 |
| 53 | Units 1 & 2 Emergency Diesel Generator (197 HP) | 0.00005 |
| Total | | 7315.42 |
| Mosaic Facility SO₂ Emissions | | |
| EU ID | Unit Description | 2015 SO₂ Emissions (tons) |
| 4 | No. 7 Sulfuric Acid Plant | 668.33 |
| 5 | No. 8 Sulfuric Acid Plant | 532.19 |

| | | |
|---|--|---|
| 6 | No. 9 Sulfuric Acid Plant | 529.11 |
| 7 | No. 6 AP Plant | 0.02 |
| 55 | No. 5 AP Plant | 0.04 |
| 63 | Tank Nos. 1, 2, and 3 for molten sulfur storage w/scrubber | 0 |
| 66 | Sulfur Pit #7, Molten Storage/Handling System | 0.02 |
| 67 | Sulfur Pit #8, Molten Storage/Handling System | 0.02 |
| 68 | Sulfur Pit #9, Molten Storage/Handling System | 0.02 |
| 74 | Truck Loading Station for Molten Sulfur w/common scrubber | 0 |
| 111 | Existing Emergency Stationary RICE < or equal to 500 HP | 0.13 |
| 112 | Auxiliary Boiler | 0.002 |
| 113 | Non-Emergency CI ICE | 3.44 |
| Total | | 1733.32 |
| Ajax Facility SO₂ Emissions | | |
| EU ID | Unit Description | 2015 SO₂ Emissions (tons) |
| 5 | Diesel Engine and Power Generator for RAP Crusher | 0.05 |
| 6 | Drum Mix Asphalt Plant (400TPH) | 0.25 |
| Total | | 0.30 |
| Harsco Facility SO₂ Emissions | | |
| EU ID | Unit Description | 2015 SO₂ Emissions (tons) |
| 1 | Fluid Bed Slag Dryer | 0.004 |
| Total | | 0.004 |
| Total All Point Sources | | 9,049.05 |

Table 6. 2015 Attainment Emissions Inventory for the Hillsborough County Area

| Source Type | Point | Area | Non-Road | On-Road | Total |
|---|----------|------|----------|---------|----------|
| 2015 SO₂ Emissions (tons) | 9,049.05 | 8.80 | 0.16 | 1.86 | 9,059.87 |

For additional information regarding the development of the attainment year inventory, please see Appendix D to Florida's June 7, 2018, submittal.

c. Maintenance Demonstration

Maintenance of the SO₂ standard is demonstrated either by showing that future emissions will not exceed the level of the attainment emissions inventory year or by modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS.

To evaluate maintenance through 2032 and satisfy the 10-year interval required in CAA section 175A, Florida prepared projected emissions inventories for 2020-2032. The emissions

inventories are composed of the following general source categories: point, area, non-road mobile, and on-road mobile. The emissions inventories were developed consistent with EPA guidance and are summarized in Table 7. Florida compared the projected emissions for the final year of the maintenance plan (2032) to the attainment emissions inventory year (2015) and compared interim years to the attainment emissions inventory year to demonstrate continued maintenance of the 2010 1-hour SO₂ standard. For additional information regarding the development of the projected inventories, please see Appendix D to Florida's June 7, 2018, SIP submittal.

Table 7. Projected Future Emissions Inventories for the Area

| Source Type | Projected 2020 SO₂ Emissions (tons) | Projected 2023 SO₂ Emissions (tons) | Projected 2026 SO₂ Emissions (tons) | Projected 2029 SO₂ Emissions (tons) | Projected 2032 SO₂ Emissions (tons) |
|--------------------|---|---|---|---|---|
| Point | 9,049.05 | 9,049.05 | 9,049.05 | 9,049.05 | 9,049.05 |
| Area | 9.53 | 10.01 | 10.47 | 10.91 | 11.31 |
| Non-road | 0.18 | 0.19 | 0.20 | 0.20 | 0.21 |
| On-road | 0.74 | 0.71 | 0.69 | 0.67 | 0.66 |
| Total | 9,059.49 | 9,059.95 | 9,060.40 | 9,060.83 | 9,061.23 |

In situations where local emissions are the primary contributor to nonattainment, such as the Hillsborough County Area, if the future projected emissions in the nonattainment area remain at or below the baseline emissions in the nonattainment area, then the related ambient air quality standards should not be exceeded in the future. Florida has projected emissions as described previously, and these projections indicate that emissions in the Hillsborough County Area will remain at nearly the same levels as those in the attainment year inventory for the duration of the maintenance plan. While these projections include a small increase in area source and non-road emissions from 2020 to 2032 (1.81 tons), the increase is negligible when compared to the total

emissions inventory, and EPA does not believe that this projected increase should cause an exceedance of the SO₂ NAAQS through 2032. This belief is supported by the fact that Florida does not anticipate any future development within the Area that could potentially increase SO₂ emissions and the fact that any increases in actual emissions from Mosaic or Big Bend are required to remain below the modeled emissions that demonstrate attainment for the 1-hour SO₂ NAAQS. Furthermore, any potential future SO₂ emissions sources that may locate in or near the Area would be required to comply with the FDEP's approved NSR permitting programs to ensure that the Area will continue to meet the NAAQS. EPA also notes that the natural gas fuel requirement for EUs 1 and 2 at Big Bend and the reduced four-unit SO₂ cap proposed for incorporation into the SIP are expected to further reduce SO₂ emissions beyond the levels projected in Table 7.

As discussed in the SO₂ Nonattainment Area Guidance, an approved attainment plan that relies on air quality dispersion modeling using maximum allowable emissions, such as Florida's attainment plan for the Area, can generally be expected to demonstrate that the standard will be maintained for the requisite 10 years and beyond without regard to any changes in operation rate of the pertinent sources that do not involve increases in maximum allowable emissions.³⁵ EPA believes that the Area will continue to maintain the standard at least through the year 2032 because the air quality modeling in the approved attainment plan showed that the Area would attain the standard based on the maximum allowable emissions limits at Mosaic and Big Bend that are incorporated into the SIP, these sources have fully implemented these permanent and enforceable measures, and the emissions reductions from these measures are reflected in the

³⁵ See SO₂ Nonattainment Area Guidance at p.67.

attaining design values for the Area. As discussed above, EPA believes that the modeling in the attainment plan using the four-unit SO₂ cap of 3,162 lb/hr at Big Bend is more conservative (in relation to a demonstration relying on the lowered cap) and is still valid for demonstrating attainment in the Area.

d. Monitoring Network

The East Bay monitor (12-057-0109) is the only SO₂ monitor located within the Hillsborough County Area, and the 2010 1-hour SO₂ nonattainment designation was based on data collected from 2009-2011 at this monitor. In its maintenance plan, Florida has committed to continue operating an appropriate SO₂ monitoring network, consult with EPA prior to making any changes to the existing network, and continue to quality assure the monitoring data in accordance with 40 CFR part 58. Therefore, Florida has addressed the requirement for monitoring. FDEP's monitoring network plan was submitted on June 28, 2018, and approved by EPA on October 22, 2018.

e. Verification of Continued Attainment

The State of Florida, through FDEP, has the legal authority to enforce and implement all measures necessary to attain and maintain the NAAQS. Section 403.061(35), Florida Statutes, authorizes the Department to "exercise the duties, powers, and responsibilities required of the state under the federal Clean Air Act. This includes implementing and enforcing all measures necessary to attain and maintain the NAAQS. In addition, FDEP will use emissions data submitted by Mosaic and Big Bend through annual operating reports to verify continued compliance with the permitted emissions rates that were shown through the modeling demonstration in the attainment plan to be sufficient to provide for maintenance of the 2010 1-

hour SO₂ NAAQS throughout the Area. Any increases in actual emissions from Mosaic or Big Bend must remain below their permitted levels. Furthermore, any potential future SO₂ emissions sources that may locate in or near the Area would be required to comply with FDEP's approved NSR permitting programs to ensure that the Area will continue to meet the NAAQS. In addition to assuring continued attainment in this manner, FDEP will verify continued attainment through operation of the monitoring network.

f. Contingency Measures in the Maintenance Plan.

Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation, and a time limit for action by the state. In cases where attainment revolves around compliance of a single source or a small set of sources with emissions limits shown to provide for attainment, EPA interprets "contingency measures" to mean that the state agency has a comprehensive program to identify sources of violations of the SO₂ NAAQS and to undertake aggressive follow-up for compliance and enforcement, including expedited procedures for establishing enforceable consent agreement pending the adoption of revised SIPs.³⁶ A state should also identify specific indicators to be used to determine when the contingency measures need to be implemented. The maintenance plan must include a requirement that a state will implement all measures with respect to control of the pollutant that were contained in the SIP before redesignation of the area to attainment in accordance with section 175A(d).

³⁶ See SO₂ Nonattainment Area Guidance at p.69.

The contingency plan included in the maintenance plan contains triggers to determine when contingency measures are needed and what kind of measures should be used. Upon notification by the FDEP Office of Air Monitoring that the East Bay monitor has registered SO₂ levels in excess of the standard for a fourth time during a calendar year, FDEP will notify Mosaic and Big Bend of the occurrence of the fourth high exceedance. Upon notification by FDEP of a confirmed fourth high exceedance,³⁷ Mosaic and Big Bend will, without any further action by FDEP or EPA, undertake a full system audit of all emissions units subject to control under the attainment plan. Within 10 days of notification of the confirmed fourth high exceedance, each source will independently submit a written system audit report to FDEP summarizing all operating parameters of all emissions units for four 10-day periods up to and including the dates of the exceedances together with recommended provisional SO₂ emission control strategies for each affected unit and evidence that these control strategies have been deployed, as appropriate. Upon receipt of the above-mentioned reports, FDEP will then begin a 30-day evaluation of these reports to determine the cause of the exceedances, followed by a 30-day consultation period with the sources to develop and implement appropriate operational changes. At the end of the consultation period, FDEP will mandate operational changes identified by the written system audit to prevent any future violation of the NAAQS. Any necessary changes would be implemented as soon as practicable, with at least one implemented within 18-24 months of the monitored violation, in order to bring the Area into attainment as expeditiously as possible. These changes could include, but would not be limited to:

- fuel switching to reduce or eliminate the use of sulfur-containing fuels; and

³⁷ Confirmation of a fourth high exceedance over the SO₂ NAAQS would be made after quality assurance activities are completed, but not necessarily with FDEP-certified data.

- physical or operational reduction of production capacity, as appropriate.

If a permit modification is necessary, the State would issue a final permit in accordance to Sections 120 and 403 of the Florida Statutes. Subsequently, Florida would submit any relevant permit change to EPA as a source-specific SIP revision to make the change permanent and enforceable. In addition to including these contingency measures in the maintenance plan, Florida also stated that all existing control measures will remain in effect after redesignation.

EPA has preliminarily concluded that the maintenance plan adequately addresses the five basic components of a maintenance plan: the attainment emissions inventory; maintenance demonstration; monitoring; verification of continued attainment; and a contingency plan. Therefore, EPA proposes to determine that the maintenance plan for the Area meets the requirements of section 175A of the CAA and proposes to incorporate the maintenance plan into the Florida SIP.

VII. What is the Effect of EPA's Proposed Actions?

Approval of Florida's redesignation request would change the designation of the portion of Hillsborough County that is within the Hillsborough County Area, as found at 40 CFR part 81, section 81.310, from nonattainment to attainment for the 2010 1-hour SO₂ NAAQS. Approval of Florida's associated SIP revision would also incorporate a plan for maintaining the 2010 1-hour SO₂ NAAQS in the Hillsborough County Area through 2032 into the SIP. Incorporation of the Big Bend permit conditions discussed above from Permit No. 0570039-120-AC into the SIP would make them permanent and federally enforceable.

VIII. Incorporation by Reference

EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference into Florida's SIP the following conditions from Permit No. 0570039-120-AC issued by FDEP to Big Bend with an effective date of December 14, 2018: (1) Section 2, Condition 4; (2) the "SO₂ Emissions Cap" provision from Section 3, Condition 4;³⁸ (3) the "SO₂ CEMS" provision from Section 3, Condition 4;³⁹ and (4) the "Methods of Operation" for Units 1 and 2 provision from Section 3, Condition 6.⁴⁰

EPA has made, and will continue to make, these materials generally available through www.regulations.gov and at EPA Region 4 office (please contact the person identified in the "For Further Information Contact" section of this preamble for more information).

IX. Proposed Actions.

EPA is proposing to take four separate but related actions regarding the redesignation request and associated SIP revision for the Hillsborough County Area.

First, EPA is proposing to determine that the Area attained the 2010 1-hour SO₂ NAAQS by its attainment date of October 4, 2018. This determination is being proposed in accordance with section 179(c)(1) of the CAA.

³⁸ In its April 16, 2019 submittal, Florida identifies this provision as "Section 3, Subsection B, Specific Condition 2"; however, it is contained under the heading "4. Permit Being Modified: Permit No. 0570039-096-AC" in Section 3 of Permit No. 0570039-120-AC. See Section V of this notice for additional information.

³⁹ In its April 16, 2019 submittal, Florida identifies this provision as "Section 3, Subsection B, Specific Condition 3; however, it is contained under the heading "4. Permit Being Modified: Permit No. 0570039-096-AC" in Section 3 of Permit No. 0570039-120-AC. See Section V of this notice for additional information.

⁴⁰ In its April 16, 2019 submittal, Florida identifies this provision as "Section 3, Subsection A, Specific Condition 3a; however, it is contained under the heading "6. Permits Being Modified: Permit Nos. 0570039-066-AC & 109-AC" in Section 3 of Permit No. 0570039-120-AC. See Section V of this notice for additional information.

Second, EPA is proposing to approve the maintenance plan for the Area and to incorporate it into the SIP. As described above, the maintenance plan demonstrates that the Area will continue to maintain the 2010 1-hour SO₂ NAAQS through 2032.

Third, EPA is proposing to approve Florida's request for redesignation of the Area from nonattainment to attainment for the 2010 1-hour SO₂ NAAQS.

Fourth, EPA is proposing to incorporate into the SIP the aforementioned permitting conditions applicable to Big Bend, including a condition that lowers the SO₂ emissions cap by approximately 32 percent and a condition that restricts the fuel use at two electric generating units to natural gas.

If finalized, approval of the redesignation request for the Hillsborough County Area would change the official designation of the portion of Hillsborough County, Florida, encompassed by the polygon with the vertices using UTM coordinates in UTM zone 17 with datum NAD83 as follows: (1) Vertices-UTM Easting (m) 358581, UTM Northing 3076066; (2) vertices-UTM Easting (m) 355673, UTM Northing 3079275; (3) UTM Easting (m) 360300, UTM Northing 3086380; (4) vertices-UTM Easting (m) 366850, UTM Northing 3086692; (5) vertices-UTM Easting (m) 368364, UTM Northing 3083760; and (6) vertices-UTM Easting (m) 365708, UTM Northing 3079121, as found at 40 CFR part 81, from nonattainment to attainment for the 2010 1-hour SO₂ NAAQS.

X. Statutory and Executive Order Reviews

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed

by state law. A redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. *See* 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, these proposed actions merely propose to approve state law as meeting Federal requirements and do not impose additional requirements beyond those imposed by state law. For this reason, these proposed actions:

- Are not significant regulatory actions subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Are not Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory actions because these actions are not significant regulatory actions under Executive Order 12866;
- Do not impose information collection burdens under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Do not contain any unfunded mandates or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);

- Do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Are not economically significant regulatory actions based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Are not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Will not have disproportionate human health or environmental effects under Executive Order 12898 (59 FR 7629, February 16, 1994).

These proposed actions do not apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, these proposed actions do not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will they impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference,
Intergovernmental relations, Reporting and recordkeeping, Sulfur dioxide.

List of Subjects in 40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

Authority: 42 U.S.C. 7401 et seq.

Dated: July 18, 2019.

Mary S. Walker,
Regional Administrator,
Region 4.

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